

# **Cables for I/O Relay Terminals** XW2Z-R

# Connect I/O Relay Terminals to I/O Units for Programmable Controllers with one touch.

- Cables with Connectors for G70V and G7TC I/O Relay Terminals, G70D and G70R Relay Terminals, and G70A and P7TF-IS/OS I/O Terminal Sockets.
- Cables with loose wires available with or without crimp terminals.
- Cables available for programmable controllers from Mitsubishi Electric.



# **Cable Types and Table of Contents**

O-marks to	Comments to Ammonismos		Nama	I/O	Tourised medial	Wiring diagram	
Connects to	Appearance	Description	Name	Classification	Typical model	Page	Number
Connections with terminal blocks of various devices	10	This Cable is convenient for connecting I/O Relay Terminals to devices equipped with screw terminals.	Cables with Loose Wires and Crimp Terminals	16 I/O points	XW2Z-RY□C	(1)	
		This Cable has loose wires at the device end.	Cables with Loose Wires	16 I/O points	XW2Z-RA□C	4	(2)
	1	Connects a PLC I/O Unit, DeviceNet slave or other device with Fujitsu/Otax connectors 1:1 to an I/O Relay Terminal.	Cables with Connectors (1:1)	16 I/O points	XW2Z-R□C		(3)
Fujitsu/Otax connectors		Connects a PLC I/O Unit, DeviceNet slave, or other device	Cables with Connectors (1:2)	32 input points	XW2Z-RI□C-□	5	(4)
		with Fujitsu/Otax connectors 1:2 to I/O Relay Terminals.		32 output points	XW2Z-RO□C-□		(5)
		Connects a PLC I/O Unit, DeviceNet slave, or other device with Fujitsu/Otax connectors 1:3 to I/O Relay Terminals.	Cables with Connectors (1:3)	48 I/O points	XW2Z-R□C-□-□	6	(6)
		Connects a PLC I/O Unit, DeviceNet slave, or other device	Cables with Connectors (1:1)	16 input points/ 16 output points	XW2Z-RO□C	7	(7)
	19	with MIL connectors 1:1 to an I/O Relay Terminal.			XW2Z-RI□C		(8)
MIL connectors		Connects a PLC I/O Unit, DeviceNet slave, or other device		32 input points/ 32 output points 16 input points/	XW2Z-RO□-□-D1	- 8 -	(9)
WIL CONNECTORS		with MIL connectors 1:2 to I/O Relay Terminals.	Cables with Con-		XW2Z-RI□-□-D1		(10)
	4	,	nectors (1:2)		XW2Z-RI□-□-D2		(11)
•		Connects a DeviceNet slave or			XW2Z-RM□-□-D1		(12)
	4	other device with MIL connectors 1:2 to I/O Relay Terminals.		16 output points (32 I/O points)	XW2Z-RM□-□-D2	9	(13)
Mitsubishi Electric PLCs Applicable models: For inputs: AX42, A1SX41, A1SX42,		Connects Mitsubishi Electric PLCs with 32-point connectors to	Mitsubishi Electric PLC Connecting	32 input points	XW2Z-RI□C-MN	- 10	(14)
QX41, and QX42 For outputs: AY42, A1SY41, A1SY42, QY41P, and QY42P	)" '	I/O Relay Terminals through a special cable.	Cables (1:2)	32 output points	XW2Z-RO□C-MN		(15)

Note: For combinations of Connections, refer to I/O Relay Terminals and Connected Devices (Cat. No. J217) or to the datasheets for related products

# XW2Z-R

# **Ordering Information**

Type (A side)	Name	I/O Classification	Appearance	Cable leng	th L (mm)	Models												
				1,0	00	XW2Z-RY100C												
	Cables with Loose Wires		A side B side	1,5	00	XW2Z-RY150C												
	and Crimp Terminals	16 I/O points	Device end I/O Relay Terminal	2,000		XW2Z-RY200C												
Loose wire connectins	XW2Z-RY□C			3,0	00	XW2Z-RY300C												
			300 L	5,0	00	XW2Z-RY500C												
	Cables with Loose Wires	16 I/O points		2,0	00	XW2Z-RA200C												
	XW2Z-RA□C		300 L	5,0	00	XW2Z-RA500C												
				1,0	00	XW2Z-R100C												
	Cables with Connectors		П	1,5	00	XW2Z-R150C												
Fujitsu/Otax connectors (24 pins)	(1:1)	16 I/O points		2,0	00	XW2Z-R200C												
(2 1 pino)	XW2Z-R□C			3,0	00	XW2Z-R300C												
			L ——	5,000		XW2Z-R500C												
	Cables with Connectors (1:2)  XW2Z-RI□C-□  XW2Z-RO□C-□			(A) 1,000	(B) 750	XW2Z-RI100C-75												
		32 input points  32 output points		(A) 1,500	(B) 1,250	XW2Z-RI150C-125												
			(A) —	(A) 2,000	(B) 1,750	XW2Z-RI200C-175												
				(A) 3,000	(B) 2,750	XW2Z-RI300C-275												
Fujitsu/Otax connectors				(A) 5,000	(B) 4,750	XW2Z-RI500C-475												
(40 pins)			(120)	(A) 1,000	(B) 750	XW2Z-RO100C-75												
				(A) 1,500	(B) 1,250	XW2Z-RO150C-125												
			32 output points	32 output points	32 output points	32 output points	32 output points	32 output points	Straight length (without bends)	(A) 2,000	(B) 1,750	XW2Z-RO200C-175						
			Ottaight length (without bends)	(A) 3,000 (B) 2,750		XW2Z-RO300C-275												
				(A) 5,000	(B) 4,750	XW2Z-RO500C-475												
	Cables with Connectors (1:3)  XW2Z-R□C-□-□	48 I/O points													(A) ————————————————————————————————————	(A) (B) 1,500 1,25	(C) 1,000	XW2Z-R150C-125-100
Fujitsu/Otax connectors (56 pins)			(120)	(A) (B) 2,000 1,75	(C) 1,500	XW2Z-R200C-175-150												
			C(C) —— Straight length (without bends)	(A) (B) 3,000 2,75	(C) 2,500	XW2Z-R300C-275-250												
	Cables with Connectors		_	25	60	XW2Z-RO25C												
MIL connectors (20 pins)	(1:1)	46.1/0		500		XW2Z-RO50C												
	XW2Z-RO□C	16 I/O points		25	60	XW2Z-RI25C												
	XW2Z-RI□C		,	50	0	XW2Z-RI50C												

Type (A side)	Name	I/O Classification	Appearance	Cable leng	gth L (mm)	Models		
				(A) 500	(B) 250	XW2Z-RO50-25-D1		
				(A) 750	(B) 500	XW2Z-RO75-50-D1		
						(A) 1,000	(B) 750	XW2Z-RO100-75-D1
				(A) 1,500	(B) 1,250	XW2Z-RO150-125-D1		
				(A) 2,000	(B) 1,750	XW2Z-RO200-175-D1		
				(A) 3,000	(B) 2,750	XW2Z-RO300-275-D1		
				(A) 5,000	(B) 4,750	XW2Z-RO500-475-D1		
		32 I/O points	A	(A) 500	(B) 250	XW2Z-RI50-25-D1		
		oz i/o points	A side B side Device end I/O Relay Terminal	(A) 750	(B) 500	XW2Z-RI75-50-D1		
	Cables with Connectors (1:2)		(A)	(A) 1,000	(B) 750	XW2Z-RI100-75-D1		
	, ,			(A) 1,500	(B) 1,250	XW2Z-RI150-125-D1		
MIL connectors (40 pins)	XW2Z-RO□-□-D1, XW2Z-RI□-□-D1,	16 inputs and 16 outputs (32 I/O points)		(A) 2,000	(B) 1,750	XW2Z-RI200-175-D1		
	XW2Z-RI□-□-D2, XW2Z-RM□-□-D1*, XW2Z-RM□-□-D2*		(120)	(A) 3,000	(B) 2,750	XW2Z-RI300-275-D1		
			(B) Straight length (without bends)	(A) 5,000	(B) 4,750	XW2Z-RI500-475-D1		
				(A) 500	(B) 250	XW2Z-RI50-25-D2		
				(A) 750	(B) 500	XW2Z-RI75-50-D2		
				(A) 500	(B) 250	XW2Z-RM50-25-D1		
				(A) 750	(B) 500	XW2Z-RM75-50-D1		
				(A) 1,000	(B) 750	XW2Z-RM100-75-D1		
				(A) 1,500	(B) 1,250	XW2Z-RM150-125-D1		
				(A) 2,000	(B) 1,750	XW2Z-RM200-175-D1		
				(A) 3,000	(B) 2,750	XW2Z-RM300-275-D1		
<u></u>				(A) 5,000	(B) 4,750	XW2Z-RM500-475-D1		
				(A) 1,000	(B) 750	XW2Z-RI100C-75-MN		
Mitsubishi Electric PLCs with		32 input points	(A)	(A) 1,500	(B) 1,250	XW2Z-RI150C-125-MN		
32-point connectors (1:2)	Mitsubishi Electric PLC	52 iliput politis		(A) 2,000	(B) 1,750	XW2Z-RI200C-175-MN		
Applicable models:	Connecting Cables			(A) 3,000	(B) 2,750	XW2Z-RI300C-275-MN		
For inputs: AX42, A1SX41, A1SX42, QX41, and QX42	XW2Z-RI□C-□-MN		(120)	(A) 1,000	(B) 750	XW2Z-RO100C-75-MN		
For outputs: AY42, A1SY41, A1SY42, QY41P, and	XW2Z-RO□C-□-MN	22 output points		(A) 1,500	(B) 1,250	XW2Z-RO150C-125-MN		
QY42P		32 output points	←── (B) ────  Straight length (without bends)	(A) 2,000	(B) 1,750	XW2Z-RO200C-175-MN		
			,	(A) 3,000	(B) 2,750	XW2Z-RO300C-275-MN		

**Note:** For a connector pin assignment diagram and cable color information, refer to the wiring drawings.

 $<sup>\</sup>begin{tabular}{ll} $\star$ These cables are used to connect to slave products for DeviceNet and other networks. \end{tabular}$ 

# Wiring diagram

#### For various devices

# (1) Cables with Loose Wires and Crimp Terminals (16 I/O points)

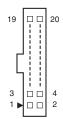
#### XW2Z-RY□C

	A si	de		B side	
Marker tube No. *1	Insula- tion color	Dot mark	Dot color	CN1 Pin No.	Corresponding G70V/G7TC connec- tor pin number*2
20	BLUE	-	RED	1	20
10	BLUE		BLACK	2	10
19	PINK	•	RED	3	19
9	PINK	-	BLACK	4	9
18	GREEN		RED	5	18
8	GREEN	•	BLACK	6	8
17	ORANGE	-	RED	7	17
7	ORANGE	-	BLACK	8	7
16	GRAY		RED	9	16
6	GRAY	-	BLACK	10	6
15	BLUE	-	RED	11	15
5	BLUE		BLACK	12	5
14	PINK	-	RED	13	14
4	PINK	-	BLACK	14	4
13	GREEN	-	RED	15	13
3	GREEN	-	BLACK	16	3
12	ORANGE	-	RED	17	12
2	ORANGE	-	BLACK	18	2
11	GRAY	-	RED	19	11
1	GRAY	-	BLACK	20	1

- \*1. Marker tube numbers and the G70V and G7TC connector pin numbers are same. Be careful when using with other models (Relay Terminals). Refer to the datasheet for specific products for details.
- \*2. Refer to the datasheets for the G70V and G7TC for the connector pin layouts of I/O Relay Terminals.



Connector Pin Diagram (from Connector Mating Side)



Item	Part		
Terminal Connector	A side	Loose Wires and Crimp Terminals (fork terminal (1.25-3))	
Connector	B side	XG4M-2030-T (MIL connector)	
Cable	UL2464 BC10P-SB AWG28(7/0.127) Interface cable (Cable color: Gray)		

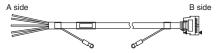
- Note: 1. The power line capacity is 50 mA max. per I/O point. Also, always check the driver capacity and I/O relay power consumption when using for outputs.
  - 2. The crimp terminals are labeled with the corresponding connector pin numbers in parentheses. Refer to the Connector Pin No. Tables for marker tube numbers.
  - 3. Connect terminals 9 and 19 and terminals 10 and 20 together when using the G7TC-OC08.
  - **4.** The wire gauge of the wires in the cable is 28 AWG (7/ 0.127).

#### (2) Cables with Loose Wires (16 I/O points)

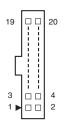
#### XW2Z-RA□C

	A side			B side
Insulation color	Dot mark	Dot color	CN1 Pin No.	Corresponding G70V/G7TC connec- tor pin number*
ORANGE	-	BLACK	20	1
ORANGE	-	RED	19	11
GRAY	•	BLACK	18	2
GRAY	•	RED	17	12
WHITE	•	BLACK	16	3
WHITE	•	RED	15	13
YELLOW	•	BLACK	14	4
YELLOW	•	RED	13	14
PINK	•	BLACK	12	5
PINK	•	RED	11	15
ORANGE		BLACK	10	6
ORANGE		RED	9	16
GRAY		BLACK	8	7
GRAY		RED	7	17
WHITE		BLACK	6	8
WHITE		RED	5	18
YELLOW		BLACK	4	9
YELLOW		RED	3	19
PINK		BLACK	2	10
PINK		RED	1	20

\*Refer to the datasheets for the G70V and G7TC for the connector pin layouts of I/O Relay Terminals.



Connector Pin Diagram (from Connector Mating Side)



Item		Part		
	A side	Loose Wires		
Terminal Connector	B side	XG5M-2032-N XG5S-2012 (MIL connector)		
Cable	UL2464 BC10P-SB AWG24(7/0.203) Interface cable (Cable color: Black)			

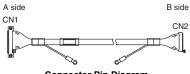
- **Note: 1.** The wire gauge of the wires in the cable is 24 AWG (7/ 0.203).
  - Connect terminals 9 and 19 and terminals 10 and 20 together when using the G7TC-OC08.

# For Fujitsu/Otax connectors

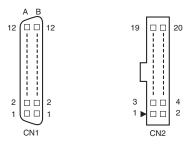
# (3) Cables with Connectors (1:1) (16 I/O points)

## XW2Z-R□C

CN1	CN2
1A	20
1B	19
2A	18
2B	17
3A	16
3B	15
4A	14
4B	13
5A	12
5B	11
6A	10
6B	9
7A	8
7B	7
8A	6
8B	5
9A	4
9B	3
10A	2
10B	1
11A	
11B	NC
12A	1,0
12B	



Connector Pin Diagram (from Connector Mating Side)



Item	Part			
Terminal Connector	A side	Fujitsu FCN-367J024-AU/F * Otax N367J024AUF		
	B side	XG4M-2030-T (MIL connector)		
Cable	UL2464 BC10P-SB AWG28 (7/0.127) Interface cable (Cable color: Gray)			

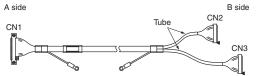
<sup>\*</sup>The connector is made by Fujitsu/Otax.

# (4) Cables with Connectors (1:2) (32 I/O points) XW2Z-RI□C-□

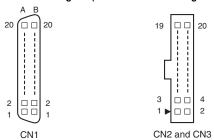
CN1	CN2	CN3
1A	20	-
1B		20
2A	18	-
2B		18
3A	16	
3B		16
4A	14	
4B		14
5A	12	
5B		12
6A	10	
6B		10
7A	8	
7B		8
8A	6	
8B		6
9A	4	
9B		4
10A	19	
10B		19
11A	17	
11B		17
12A	15	
12B		15
13A	13	
13B		13
14A	11	
14B		11
15A	9	
15B		9
16A	7	
16B		7
17A	5	
17B		5
18A	3	
18B		3
19A		
19B	N	С
20A	.,	~
20B		

# (5) Cables with Connectors (1:2)(32 I/O points)XW2Z-RO□C-□

		I
CN1	CN2	CN3
1A	20	
1B		20
2A	18	
2B		18
3A	16	
3B		16
4A	14	
4B		14
5A	12	
5B		12
6A	10	
6B		10
7A	8	
7B		8
8A	6	
8B		6
9A	4	
9B		4
10A	2	
10B		2
11A	19	
11B		19
12A	17	
12B		17
13A	15	
13B		15
14A	13	
14B		13
15A	11	
15B		11
16A	9	
16B		9
17A	7	
17B		7
18A	5	
18B		5
19A	3	
19B		3
20A	1	
20B		1
•		



#### Connector Pin Diagram (from Connector Mating Side)



Item		Part			
Terminal Connector	A side	Fujitsu FCN-367J040-AU/FW *			
	B side	XG4M-2030-T×2 (MIL connector)			
Cable	Interface Cable	BC20P-SB AWG28(7/0.127)  cable color: Gray color: XW2Z-RI□C-□ CN2, CN3: Red			

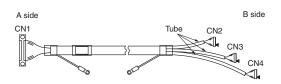
<sup>\*</sup> The connector is made by Fujitsu/Otax.

# For Fujitsu/Otax connectors

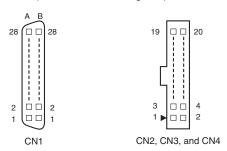
# (6) Cables with Connectors (1:3) (48 I/O points)

## XW2Z-R□C-□-□

CN1	CN2	CN3	CN4
1A	20		
1B	19		
2A	18		
2B	17		
3A	16		
3B	15		
4A	14		
4B	13		
5A	12		
5B	11		
6A	10		
6B	9		
7A	8		
7B	7		
8A	6		
8B	5		
9A	4		
9B	1		
10A		20	
10B		19	
11A		18	
11B		17	
12A		16	
12B		15	
13A		14	
13B		13	
14A		12	
14B		11	
15A		10	
15B		9	
16A		8	
16B		7	
17A		6	
17B		5	
18A		4	
18B		1	
19A			20
19B			19
20A			18
20B			17
21A			16
21B			15
22A			14
22B			13
23A			12
23B			11
24A			10
24B			9
25A			8
25B			7
26A			6
26B			5
27A			4
27B			1
			<u> </u>
28A		NC NC	
28B	1	NC	



# Connector Pin Diagram (from Connector Mating Side)



Item	Part	
Terminal Connector	A side	Fujitsu FCN-367J056-AU/FW* Otax N367J056AUF
	B side	XG4M-2030-T×3 (MIL connector)
Cable	UL2464 BC30P-SB AWG28(7/0.127) Interface cable Cable color: Gray Tube color: CN2, CN3, CN4: Black	

<sup>\*</sup> The connector is made by Fujitsu/Otax.

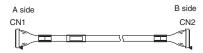
# For MIL connectors

# (7) Cables with Connectors (1:1) (16 I/O points) XW2Z-RO□C

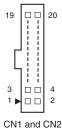
CN1	CN2
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20

## (8) Cables with Connectors (1:1) (16 I/O points) XW2Z-RI□C

CN1	CN2
3	1
4	2
1	3
2	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20



Connector Pin Diagram (from Connector Mating Side)



Item		Part
Terminal	A side	XG4M-2030-T (MIL connector)
Connector	B side	XG4M-2030-T (MIL connector)
Cable	UL2464 BC10P-SB AWG28(7/0.127) Interface cable (Cable color: Gray)	

## For MIL connectors

(9) Cables with Connectors (1:2) (32 I/O points)

XW2Z-RO□-□-D1

CN1	CN2	CN3
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9
10		10
11		11
12		12
13		13
14		14
15		15
16		16
17		17
18		18
19		19
20		20
21	1	
22	2	
23	3	
24	4	
25	5	
26	6	
27	7	
28	8	
29	9	
30	10	
31	11	
32	12	
33	13	
34	14	
35	15	
36	16	
37	17	
38	18	
39	19	
40	20	

# (10) Cables with Connectors (1:2) (32 I/O points)

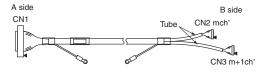
XW2Z-RI□-□-D1

CN1	CN2	CN3
1		3
2		4
3		1
4		2
5		5
6		6
7		7
8		8
9		9
10		10
11		11
12		12
13		13
14		14
15		15
16		16
17		17
18		18
19		19
20		20
21	3	
22	4	
23	1	
24	2	
25	5	
26	6	
27	7	
28	8	
29	9	
30	10	
31	11	
32	12	
33	13	
34	14	
35	15	
36	16	
37	17	
38	18	
39	19	
40	20	
40	20	

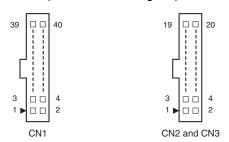
# (11) Cables with Connectors (1:2) (32 I/O points)

XW2Z-RI□-□-D2

CN1	CNO	CN2
	CN2	CN3
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9
10		10
11		11
12		12
13		13
14		14
15		15
16		16
17		17
18		18
19		19
20		20
21	1	
22	2	
23	3	
24	4	
25	5	
26	6	
27	7	
28	8	
29	9	
30	10	
31	11	
32	12	
33	13	
34	14	
35	15	
36	16	
37	17	
38	18	
39	19	
40	20	
	20	



# Connector Pin Diagram (from Connector Mating Side)



## **\*** For the XW2Z-RI/O□-□-D□

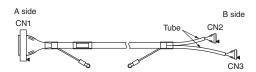
Item	Part		
Terminal	A side	XG4M-4030-T (MIL connector)	
Connector	B side	XG4M-2030-T×2 (MIL connector)	
Cable	Interface Cable	BC20P-SB AWG28(7/0.127) e cable e color: Gray color: XW2Z-RO□-□-D1 CN2, CN3: Yellow XW2Z-RI□-□-D1/D2 CN2, CN3: Red	

# For MIL connectors

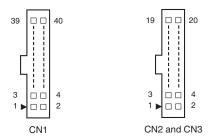
(12) Cables with Connectors (1:2) (16 input points/16 output points)

## XW2Z-RM□-□-D1

CN1	CN2	CN3
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9
10		10
11		11
12		12
13		13
14		14
15		15
16		16
17		17
18		18
19		19
20		20
21	3	
22	4	
23	1	
24	2	
25	5	
26	6	
27	7	
28	8	
29	9	
30	10	
31	11	
32	12	
33	13	
34	14	
35	15	
36	16	
37	17	
38	18	
39	19	
40	20	



# Connector Pin Diagram (from Connector Mating Side)



# (13) Cables with Connectors (1:2) (16 input points/16 output points) XW2Z-RM□-□-D2

CN1	CN2	CN3
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9
10		10
11		11
12		12
13		13
14		14
15		15
16		16
17		17
18		18
19		19
20		20
21	1	
22	2	
23	3	
24	4	
25	5	
26	6	
27	7	
28	8	
29	9	
30	10	
31	11	
32	12	
33	13	
34	14	
35	15	
36	16	
37	17	
38	18	
39	19	
40	20	

Item		Part
Terminal	A side	XG4M-4030-T (MIL connector)
Connector	B side	XG4M-2030-T×2 (MIL connector)
Cable	Interface Cable	BC20P-SB AWG28(7/0.127) e cable e color: Gray color: XW2Z-RM□-□-D1 CN2: Red, CN3: Yellow XW2Z-RM□-□-D2 CN2: Yellow, CN3: Red

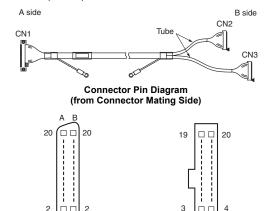
## For Mitsubishi Electric PLCs

(14) Mitsubishi Electric PLC Connecting Cables (1:2) (32 input points)

#### XW2Z-RI□C-MN

CN1	CN2	CN3
1A	1	NC
1B	3	
2A		NC
2B		4
3A		
3B		NC
4A	ļ	NC
4B		
5A		5
5B	5	
6A		7
6B	7	
7A		9
7B	9	
8A		11
8B	11	
9A		13
9B	13	
10A		15
10B	15	
11A		17
11B	17	
12A		19
12B	19	
13A		6
13B	6	
14A		8
14B	8	
15A		10
15B	10	
16A		12
16B	12	
17A		14
17B	14	
18A	16	
18B	16	
19A		18
19B	18	
20A		20
20B	20	

Note: The G70V or G7TC connector pin numbers are not the same as the XW2Z-R Cable connector pin numbers. Refer to the datasheet for specific products for details.



CN2 and CN3

# (15) Mitsubishi Electric PLC Connecting Cables (1:2) (32 output points)

#### XW2Z-RO□C-MN

CN1	CN2	CN3
1A		4
1B		2
2A	4	
2B	2	
3A		
3B	N	C
4A	.,	O
4B		
5A		5
5B	5	
6A		7
6B	7	
7A		9
7B	9	
8A		11
8B	11	
9A		13
9B	13	
10A		15
10B	15	
11A		17
11B	17	
12A		19
12B	19	
13A		6
13B	6	
14A		8
14B	8	
15A		10
15B	10	
16A		12
16B	12	
17A		14
17B	14	
18A		16
18B	16	
19A		18
19B	18	
20A		20
20B	20	

Note: The G70V or G7TC connector pin numbers are not the same as the XW2Z-R Cable connector pin numbers. Refer to the datasheet for specific products for details.

Item	Part			
Terminal	A side	Fujitsu FCN-367J040-AU/FW*		
Connector	B side	XG4M-2030-T×2 (MIL connector)		
Cable	UL2464 BC20P-SB AWG28(7/0.127) Interface cable Cable color: Gray Tube color: XW2Z-RI□C-MN CN2, CN3: Gray XW2Z-RO□C-MN CN2, CN3: Black			

<sup>\*</sup> The connector is made by Fujitsu/Otax.

CN1

# **Ratings and Specifications**

Rated current	1 A	
Rated voltage	250 V	
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.) *	
Insulation resistance	1,000 MΩ min. (at 500 VDC) *	
Dielectric strength	500 VAC for 1 min (leakage current: 1 mA max.)	
Ambient operating temperature	0 to 80°C	

<sup>\*</sup> These values are for the connectors.

# **Safety Precautions**

Be sure to read *Safety Precautions for All I/O Relay Terminals* in the website at: http://www.ia.omron.com/.

#### **Warning Indications**

Precautions for
i iccadions for
Correct Use

Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.

## **Precautions for Correct Use**

## Wiring

- Do not perform wiring work, remove connectors, or connect connectors while power is being supplied. Electric shock or damage to the device may result.
- Double-check all wiring before turning ON the power supply.
- After wiring, route the cable so that force is not applied directly to the connections.

## **Bending Radius of Connecting Cables**

• To prevent damaging the Connecting Cables, use the following minimum bending radii as guidelines. Minimum bending radius

Wiring diagram No.	Model	Minimum bending radius (mm)	
(1)	XW2Z-RY□C	68	
(2)	XW2Z-RA□C	50	
(3)	XW2Z-R□C	68	
(4)	XW2Z-RI□C-□	88	
(5)	XW2Z-RO□C-□		
(6)	<b>XW2Z-R</b> □ <b>C-</b> □-□ 99		
(7)	XW2Z-RO□C	- 68	
(8)	XW2Z-RI□C		
(9)	XW2Z-RO□-□-D1		
(10)	XW2Z-RI□-□-D1		
(11)	XW2Z-RI□-□-D2		
(12)	XW2Z-RM□-□-D1	88	
(13)	XW2Z-RM□-□-D2		
(14)	XW2Z-RI□C-□-MN		
(15)	XW2Z-RO□C-□-MN		

Refer to the manuals for the connected PLC for the connections to I/O Units for OMRON PLCs.

Series	Model	Man. No.	Manual Name
CS1	CS1G-CPU□□H, CS1H-CPU□□H	W339	Programmable Controllers Operation Manual
CJ1	CJ1H-CPU□□H-R, CJ1G/H-CPU□□H, CJ1G-CPU□□P, CJ1M-CPU□□, CJ1G-CPU□□	W393	CJ Series Programmable Controllers Operation Manual
CJ2	CJ2H-CPU6□-EIP, CJ2H-CPU6□, CJ2M-CPU□□	W472	CJ-series CJ2 CPU Unit Hardware User's Manual
NJ	NJ501-□□□	W500	NJ-series CPU Unit Hardware User's Manual
NX	NX-ID□□□□, NX-IA□□□□, NX-OD□□□□, NX-OC□□□□, NX-MD□□□□	W521	NX-series Digital I/O Units User's Manual

MEMO

# **Terms and Conditions Agreement**

## Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

#### Warranties.

- (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
- (b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See http://www.omron.com/global/ or contact your Omron representative for published information.

### **Limitation on Liability: Etc.**

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

#### Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

### **Programmable Products.**

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

#### Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

## Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

### **Errors and Omissions.**

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

Note: Do not use this document to operate the Unit.

# **OMRON Corporation** Industrial Automation Company

Kyoto, JAPAN Contact: www.ia.omron.com

Regional Headquarters

OMRON EUROPE B.V.

Wegalaan 67-69, 2132 JD Hoofddorp The Netherlands Tel: (31) 2356-81-300 Fax: (31) 2356-81-388

OMRON ASIA PACIFIC PTE. LTD.

438B Alexandra Road, #08-01/02 Alexandra Technopark, Singapore 119968 Tel: (65) 6835-3011 Fax: (65) 6835-3011

OMRON ELECTRONICS LLC

2895 Greenspoint Parkway, Suite 200 Hoffman Estates, IL 60169 U.S.A. Tel: (1) 847-843-7900 Fax: (1) 847-843-7787

OMRON (CHINA) CO., LTD. Room 2211, Bank of China Tower, 200 Yin Cheng Zhong Road, PuDong New Area, Shanghai, 200120, China Tel: (86) 21-6023-0333 Fax: (86) 21-5037-2388

Autho	rized	Distributor:

©OMRON Corporation 2016-2025 All Rights Reserved. In the interest of product improvement, specifications are subject to change without notice.

CSM\_3\_1

Cat. No. G126-E1-04 0425 (1016)